204
802/3B

Field Trip to Comilla & Gumti River to Investigate Flood Preparedness System

1. Date : 11 Feb, 1989

2. Present : Fred Cuny, Fred Kaul, (Prof Huq had intended to participate, but was unavoidably obliged to withdraw).

3. Mr. Emaduddin had arranged that Mr. Tarikuddin, Superintending Engineer of Comilla WD Circle, should receive us, together with Mr. Sayeed Uddin, XEN of Gumti WD Division.

4. Arrived at Comilla at 10-30 am, after 2 quick ferry crossings Discuss flood preparedness in Gumti with Mr. Tarikuddin, Mr. Sayeed Uddin and Mr. Faruq. During the flood season, WDB Divisional engineers are stationed at locations along the embankment so that flood monitoring and embankment emergencies can be properly carried out. "Mates" patrol embankments carry out repairs and report back as necessary. Request and receive a copy of the Gumti flood emergency system/procedures ("Revised flood warning rules for the Gumti Embankment in the District of Comilla" , Comilla Irrigation Division, June 1978). Hear that there were no breaches in the main Gumti Embankment in the course of the 1988 floods, though there was serious erosion attack and some slipping. However, there was considerable damage caused in the vicinity of the Gumti Phase I embankments which were still under construction at the time of the 1988 floods. The local authority-constructed embankments along the Gumti in the Phase I vicinity were washed out in a number of locations, and huge and deep scour holes had developed. Serious erosion affected the Phase I embankment in places. It was now necessary to revise plans so as to incorporate retirement of embankments in some places (land acquisition problems permitting), and to install river training works elsewhere (said to be expensive). It was hoped that these repairs would be complete by the impending flood season. The 1988 floods on the Gumti at Comilla were the highest on record, and peaked on 9th July, well-before the Ganges/Jamuna peak.

5. Accompanied in another vehicle by Messrs Sayeed Uddin and Faruq, we proceed to the Gumti left embankment where the river is close to the Gumti-Companyganj road. At this location, Farizpur, we met the local "head mate" and "mate", who are responsible for river embankment patrolling and emergency repairs. There is 1 mate for each 2 miles of embankment, and one supervising head mate for each 6 miles. A

house by the embankment goes with the job of mate, and this mate had already seen 30 years of service. By his house was a stockpile shed containing timber (not bamboos) and gunny sacks. The mate also acts as a chowkider for the stockpiles. In addition to the stockpiles and the manpower in the form of mates, contractors are arranged at the start of each flood season who are ready to be instantly mobilised to carry out any major emergency repairs using their own materials sources. Head mates are supposed to have bicycles. This one had a bicycle but it had long been out of order. During the 1988 floods, the water level had been about 2 feet (0.6 m) below the top of the embankment (i.e well into the 3 feet of freeboard) at this location. There were no problems with the embankment in this imediate vicinity, but they did deal with a seepage problem (sandbagged on the river side embankment face) a little further downstream. Just upstream there had been erosion problems to the left embankment, and bamboo/brushwood and timber river protection works had been installed at the point of attack after the floods receded. The maximum river velocity during the floods was quoted to be about 2 m/s. Mates were appointed from the local community, and were briefly trained in their duties by WDB staff. Asked what their main problems were, the mate and head mate replied "lack of transport (bicycles) and adequate materials."

6. Moved on Gongshonagur, where there had been a slippage in the embankment but not a breach. This had been repaired recently.

7. Proceeded to Dabiduar where an Upazila embankment had been seriously washed out in a number of places. Temporary repairs had been carried out, and bamboo/brushwood (currently not in place) bank protection had been installed, while the Phase I embankment was being constructed 100 m further from the river banks. Village house floor levels could be seen will below river flood levels.

8. Walked along the Upazila embankment (repaired by WDB) to Boro Alampur, where a long section had been completely washed out and two scour holes 50 m in diameter and 12 m deep (reportedly) had been scoured where the river first broke through. At the time of the breach, the embankment was being patrolled. The embankment was observed to slip, and the lower slipped top was then overtopped and washed out. WDB, with the help of contractors, had battled in vain initially to plug this breach, after which they abandoned their initial repair alignment in favour of a retired alignment winding between the scour holes. The latter was successful, but a number of houses were washed way and others deeply flooded, according to local inhabitants. The floods had remained for 3 months after the breach on July 5th 1988. Local people of Boro Alampur were evacuated to Dabiduar, with the help of NGO's. Many remained in their houses guarding their property until

high water levels forced them to evacuate. No boats were available for execution, only banana tree rafts. Flood relief consisted of food and shelter in Dabiduar school. There had been no post flood relief in the form of assistance in the house repair.

9. Communal bazar buildings could be seen on the river side of the Gumti left embankment. These structures had been recently constructed, apparently with official approval. It was understood that during floods these premises might have to be evacuated. However, they would clearly obstruct flood flows.

10. Back at the Comilla ofice, we concluded with another discussion and then a late lunch.